Combined Declaration and Power of Attorney for Patent Application

Docket Number: 0609.4280001/JAG/RCM

As a below named inventor, I hereby declare that:

was filed on July 17, 1997;

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter that is claimed and for which a patent is sought on the invention entitled Method of Inducing Vasodilation and Treating Pulmonary Hypertension Using Adenoviral-Mediated Transfer of the Nitric Oxide Synthase Gene, the specification of which is attached hereto unless the following box is checked:

was amendea on	plication Number or PCT International (if applicable).			
APR 1 3 1999 I hereby state that I have review among the ded by any among among the many among t	ewed and understand the contents of th referred to above.	e above identified specification, include	ding the c	claims, as
I acknowledge the duty to dis	close information that is material to pa	tentability as defined in 37 C.F.R. § 1.	56.	
inventor's certificate, or § 365 United States listed below, an	y benefits under 35 U.S.C. § 119(a)-(d) (d) (d) of any PCT international application d have also identified below any foreign g a filing date before that of the applications.	on, which designated at least one count on application for patent or inventor's or	try other t	than the
Prior Foreign Application(s)			Priority	Claimed
(Application No.)	(Country)	(Day/Month/Year Filed)	□ Yes	□ No
(Application No.)	(Country)	(Day/Month/Year Filed)	□ Yes	□ No
I hereby claim the benefit und	ler 35 U.S.C. § 119(e) of any United St	ates provisional application(s) listed b	elow.	
60/021,912	July 17, 1996			
(Application No.)	(Filing Date)			
(Application No.)	(Filing Date)	<u> </u>		
international application desig this application is not disclose paragraph of 35 U.S.C. § 112,	ter 35 U.S.C. § 120 of any United States, nating the United States, listed below a d in the prior United States or PCT into I acknowledge the duty to disclose infiliable between the filing date of the pri	and, insofar as the subject matter of eacernational application in the manner propertion that is material to patentability.	ch of the rovided by ity as defi	y the first ined in 37
(Application No.) abandoned)	(Filing Date)	(Status - patented	, pending	<u>,</u>
(Application No.) abandoned)	(Filing Date)	(Status - patented	, pending	,

Appl. No.: 08/896,053 Docket No.: 0609.4280001/JAG/RCM

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

Robert G. Sterne, Esq., Reg. No. 28,912; Edward J. Kessler, Esq., Reg. No. 25,688; Jorge A. Goldstein, Esq., Reg. No. 29,021; Samuel L. Fox, Esq., Reg. No. 30,353; David K.S. Cornwell, Esq., Reg. No. 31,944; Robert W. Esmond, Esq., Reg. No. 32,893; Tracy-Gene G. Durkin, Esq., Reg. No. 32,831; Michele A. Cimbala, Esq., Reg. No. 33,851; Michael B. Ray, Esq., Reg. No. 33,997; Robert E. Sokohl, Esq., Reg. No. 36,013; and Eric K. Steffe, Esq., Registration No. 36,688.

Send Correspondence to:

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 New York Avenue, N.W. Suite 600 Washington, D.C. 20005-3934

Direct Telephone Calls to:

Jorge A. Goldstein, Esq. (202) 371-2600

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor ,	
Stefan Janssens	
Inventor's signature	98.03.17 Date
Residence Heverlee, Belgium	
Citizenship Belgian	
Post Office Address Koning Leopold III - Iaan 53, 3001 Heverlee, Belgium	
Full name of second inventor Kenneth D. Bloch	
	Date
Kenneth D. Bloch	Date
Kenneth D. Bloch Second inventor's signature Residence	Date
Kenneth D. Bloch Second inventor's signature Residence Brooklyn, Massachusetts	Date

Appl. No.: 08/896,053 Docket No.: 0609.4280001/JAG/RCM

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Appl. No.: 08/896,053 Docket No.: 0609.4280001/JAG/RCM

Full arms (Cd.) 11	
Full name of third inventor Désiré Collen	
Third inventor's signature	98,03,17 Date
Residence Winksele, Belgium	10700,14
Citizenship Belgian	
Post Office Address Schoonzichtlaan 20, 3020 Winksele, Belgium	
Full name of fourth inventor	
Fourth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	
Full name of fifth inventor	
Fifth inventor's signature	Date
Residence	
Citizenship	
Post Office Address	

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Certificate Under 37 C.F.R. § 3.73(b)

Applicant: Stefan Janssens, Kenneth D. Bloch, and Désiré Collen
Application No: 08/896,053 Filed: July 17, 1997
For: <u>Method of Inducing Vasodilation and Treating Pulmonary Hypertension Using Adenoviral-Mediated Transfer of the Nitric Oxide Synthase Gene</u>
The General Fospital Corporation , a corporation (Type of Assignee e.g. corporation extraction in the corporation and the corporation are corporation assignee e.g. corporation and the corporation are corporation assignee e.g. corporation and the corporation are corporation assignee e.g. corporation and the corporation are corporation as a corporation and the corporation are corporation and the corporation are corporation as a corporation are corporation are corporation as a corporation are corporation are corporation as a corporation are corporation are corporation as a corporation are corporation as a corporation are corporation as a corporation are
APR 1 3 1938 Component agency, etc.)
An Assignment from the inventor Kenneth D. Block of the material visit of the second of the material visit of the second of the material visit of the second
An Assignment from the inventor Kenneth D. Bloch of the patent application identified above. The assignment was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
[or]
B. [] A chain of title from the inventor(s) of the patent application identified above to the current assignee as shown below:
1. From: To:
The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
2. From: To: To: To: The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
3. From:To:To:
The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
[] Additional documents in the chain of title are listed on a supplemental sheet.
[X] Copies of assignments or other documents in the chain of title are attached.
The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.
I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.
Date:
Name: DAVID J. GLASS, Ph.D. ASSOCIATE DIRECTOR FOR PATENTS
Title: OFFICE OF TECHNOLOGY AFFAIRS
Signature:
P:\USERS\ROBM0609\42800000\42800000\42800000\42800000\48800000\48800000\488000000\4880000000\48800000000

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ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned: Kenneth D. Bloch, the undersigned hereby sell(s) and assign(s) to The General Hospital Corporation (the Assignee) his/her entire right, title and interest

check applicable box(es)

✓ for the United States of America (as defined in 35 U.S.C. § 100),

✓ and throughout the world,

in the invention(s) known as Method of Inducing Vasodilation and Treating Pulmonary Hypertension Using Adenoviral-Mediated Transfer of the Nitric Oxide Synthase Gene for which application(s) for patent in the United States of America has (have) been executed by the undersigned on _______ (also known as United States Application No. 08/896.053, filed July 17, 1997), in any and all applications thereon, in any and all Letters Patent(s) therefor, and in any and all reissues, extensions, renewals, reexaminations of such applications or Letters Patent(s) and divisional and continuation applications thereof, to the full end of the term or terms for which such Letters Patent(s) issue, including the right to collect for all past, present and future damages, such entire right, title and interest to be held and enjoyed by the above-named Assignee to the same extent as they would have been held and enjoyed by the undersigned had this assignment and sale not been made.

The undersigned agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference that may be declared concerning the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned hereby represents that the undersigned has full right to convey the entire interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict therewith.

The undersigned hereby grant(s) Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; Samuel L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; and Eric K. Steffe, Esquire, Registration No. 36,688, of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Suite 600, Washington, D.C. 20005-3934, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Kenneth D. Bloch

IN WITNESS WHEREOF, executed by the undersigned on the date(s) opposite their name(s).

Date: 121 98

Signature of Inventor:

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Certificate Under 37 C.F.R. § 3.73(b)

Applicants. Steran Janssens, Kenneth D. Bloch, and Désiré Collen
Application No: 08/896,053 Filed: July 17, 1997
For: Method of Inducing Vasodilation and Treating Pulmonary Hypertension Using Adenoviral- Mediated Transfer of the Nitric Oxide Synthase Gene
Leuven Research and Development, V.Z.W., a corporation (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)
(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) certifies that it is an assignee of the patent application identified above by virtue of either:
A. [X] A. [X]
or for which a copy thereof is attached
[or]
B. [] A chain of title from the inventor(s) of the patent application identified above to the current assignee as shown below:
1. From: To: To: The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
2. From:
The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
3. From: To:
The document was recorded in the Patent and Trademark Office at Reel, Frame, or for which a copy thereof is attached.
[] Additional documents in the chain of title are listed on a supplemental sheet.
[X] Copies of assignments or other documents in the chain of title are attached.
The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.
I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.
Date: 98.03.17
Name: Hans Closes.
Title: Director.
Signature: ————————————————————————————————————
P:\USERS\BOBM\\0609\4280000\4280001\373CER.2 SKGF Rev. 12/1/97mac

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned: Stefan Janssens and Désiré Collen, the undersigned hereby sell(s) and assign(s) to Leuven Research and Development, V.Z.W. (the Assignee) his/her entire right, title and interest

check applicable box(es)

✓ for the United States of America (as defined in 35 U.S.C. § 100),

✓ and throughout the world,

in the invention(s) known as Method of Inducing Vasodilation and Treating Pulmonary Hypertension Using Adenoviral-Mediated Transfer of the Nitric Oxide Synthase Gene for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 98.03.17 (also known as United States Application No. 08/896.053, filed July 17, 1997), in any and all applications thereon, in any and all Letters Patent(s) therefor, and in any and all reissues, extensions, renewals, reexaminations of such applications or Letters Patent(s) and divisional and continuation applications thereof, to the full end of the term or terms for which such Letters Patent(s) issue, including the right to collect for all past, present and future damages, such entire right, title and interest to be held and enjoyed by the above-named Assignee to the same extent as they would have been held and enjoyed by the undersigned had this assignment and sale not been made.

The undersigned agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference that may be declared concerning the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned hereby represents that the undersigned has full right to convey the entire interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict therewith.

The undersigned hereby grant(s) Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; Samuel L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala, Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; and Eric K. Steffe, Esquire, Registration No. 36,688, of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Suite 600, Washington, D.C. 20005-3934, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned on the date(s) opposite their name(s).

Date: 48 3 17

Signature of Inventor:

Stefan Janssens

Date: (

1803.17

Signature of Inventor:

P:\USERS\BOBM\0609\4280000\4280001\2ASSIGNM.WPD

POWER OF ATTORNEY FROM MULTIPLE ASSIGNEES

THE OF MITORIAL PROMIMULTIPLE	
(1) The General Hospital Corporation, a corporation of Massachusetts, have Fruit Street, Boston, Massachusetts, and (2) Leuven Research and Develogelgium, having a principal place of business at Groot Begijnhof, Benedenstrare, collectively, assignees of the entire right, title and interest for the United SU.S.C. § 100), by reason of an Assignment executed to Assignee (1) on fano (2) on of an invention known as Method of Inducing Vasor Hypertension Using Adenoviral-Mediated Transfer of the Nitric Oxide synthm 0609.4280001), that is disclosed and claimed in a patent application of the substance of Janssens, Kenneth D. Bloch and Désiré Collen (said application filed on July Trademark Office, having Application Number 08/896,053).	tates of America (as defined in 35 and to Assignee dilation and Treating Pulmonary lase Gene (Attorney Docket No.
The Assignees hereby appoint the following U.S. attorneys to prosecute this a divisional, continuation-in-part, or reissue application thereof, and to transact a Trademark Office connected therewith: Robert Greene Sterne, Registration Registration No. 25,688; Jorge A. Goldstein, Registration No. 29,021; Samuel David K.S. Cornwell, Registration No. 31,944; Robert W. Esmond, Registration N Registration No. 32,831; Michael A. Cimbala, Registration No. 33,851; Michael Robert E. Sokohl, Esquire Registration No. 36,013; and Eric K. Steffe, Registrathereby grant said attorneys the power to insert on this Power of Attorney any f necessary or desirable in order to comply with the rules of the U.S. Patent and T Send correspondence to:	No. 28,912; Edward J. Kessler, L. Fox, Registration No. 30,353; o. 32,893; Tracy-Gene G. Durkin, B. Ray, Registration No. 33,997; ation No. 36,688. The Assignees
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 New York Avenue, N.W. Suite 600 Washington, D.C. 20005-3934 U.S.A.	
Direct phone calls to 202-371-2600.	
FOR: The Lawred Hospital	la perch
SIGNATURE:	/
BY: DAVID J. GLASS, Ph.D.	
ASSOCIATE DIRECTOR FOR PATENTS OFFICE OF TECHNOLOGY AFFAIRS	
DATE: Jang 22, 1998	
FOR:	
SIGNATURE:	
BY:	
TITLE:	
DATE:	

POWER OF ATTORNEY FROM MULTIPLE ASSIGNEES

Belgium, having a principal place of a are, collectively, assignees of the entire U.S.C. § 100), by reason of an Assignm (2) on	a corporation of Massachusetts , having a principal place of business at and (2) Leuven Research and Development, V.Z.W., a corporation of business at Groot Begijnhof, Benedenstraat 59, 3000 Leuven, Belgium, e right, title and interest for the United States of America (as defined in 35 tent executed to Assignee (1) on and to Assignee tion known as Method of Inducing Vasodilation and Treating Pulmonary ated Transfer of the Nitric Oxide Synthase Gene (Attorney Docket No. claimed in a patent application of the same title by the inventors Stefan é Collen (said application filed on July 17, 1997 at the U.S. Patent and Number 08/896,053).
Trademark Office connected therewith Registration No. 25,688; Jorge A. Gold David K.S. Cornwell, Registration No. 32,831; Michele A. Cin Robert E. Sokohl, Esquire Registration hereby grant said attorneys the power t	owing U.S. attorneys to prosecute this application and any continuation, sue application thereof, and to transact all business in the U.S. Patent and it. Robert Greene Sterne, Registration No. 28,912; Edward J. Kessler, Istein, Registration No. 29,021; Samuel L. Fox, Registration No. 30,353; 1,944; Robert W. Esmond, Registration No. 32,893; Tracy-Gene G. Durkin, inbala, Registration No. 33,851; Michael B. Ray, Registration No. 33,997; No. 36,013; and Eric K. Steffe, Registration No. 36,688. The Assignees of insert on this Power of Attorney any further identification that may be lay with the rules of the U.S. Patent and Trademark Office.
Send correspondence to:	
1100 New Yo Suite 600	SLER, GOLDSTEIN & FOX P.L.L.C. ork Avenue, N.W. D.C. 20005-3934
FOR:	
BY:	
TITLE:	
DATE:	
22.	
SIGNATURE:	Lewen Research and Development V.Z.W. Hons Class
TITLE:	Director
DATE:	98 · 03.17.